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Manchester University Lectures, No. 9

Hospitals, Medical Science,  
and Public Health

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# *Hospitals, Medical Science, and Public Health*

AN ADDRESS

DELIVERED AT THE OPENING OF THE MEDICAL  
DEPARTMENT OF VICTORIA UNIVERSITY,  
MANCHESTER, ON OCTOBER 1st, 1908

BY

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## Hospitals, Medical Science, and Public Health.

GENTLEMEN,—It is one of the noble attributes of the human mind never to rest contented with an achievement, be it never so useful, never so glorious. The old Manchester Infirmary, which happily escaped the division so injurious to some other city hospitals, was as famous in its great physicians and surgeons, and in its generous and enlightened benefactors, as in form it was stately and in its history monumental. Yet the mind of your citizens, thankful as they have been for a great past, would not rest contented on form and history ; gazing still insatiably into the future, contemplating the new scope and potencies of modern medicine, personal and national, reading the principles on which this progress had been, and is being, made, and the signals of these ever-widening ranges of knowledge, power, and beneficence, Manchester men, in alliance with their University, are inspired to build yet more stately, to endow more richly, and thus to organise that still vaster compass of charity, of learning, and of municipal and national efficiency which I have visited, and to which I have the great honour of bearing witness, to-day. Thankful, nevertheless, as I have said, for a great past ; but while these words are passing my lips the most ardent pilgrim will pause for a moment as, in the visions of his memory, are reflected the figures of those strong companions who lately were breasting the hill with us, but whose hands are now dropped, and whose familiar and prophetic voices are fallen into silence. Manchester and Manchester University, even after the loss of such men as Leech, Dreschfeld, Harris, Ashby, Cullingworth, Jones, Collier, will be more and more ; notwithstanding we are haunted by the pathos of human life and death wherein they, who of all of us knew best how to rejoice in these new hopes and new promises, have been taken from us ; and we are left to rejoice, if by no means alone, yet without their wise counsels,

without the enthusiasm of their presence. Still I repeat 'by no means alone.' For it is the older men, such as he who now addresses you, who see most vividly, and feel most keenly, that the fountains of life ever renewed, and of progress reinforced and accelerated, have their springs not in our generation but in the bands of eager young men whom year by year and day by day our universities bear in their pride. And if sometimes these fervid youths are inwardly disposed to scorn our ingatherings, to despise our experience, and even to hold our wisdom in suspicion,—well, it is better than if they had fed themselves with our formulas and fondled our idols. Social development has always been discontinuous; and a succession of slightly explosive generations is better than the alternative of revolution, of catastrophe by longer accumulation of pent-up stresses.

#### HOSPITAL MANAGEMENT

Permit me on the threshold of this new infirmary to make a few remarks on hospital purposes and management. Of the management of the Manchester Infirmary I know nothing, so that under this head no word of mine can be charged with censure or innuendo. I speak generally when I say that a prevailing error in hospital government is the failure of the lay managers to act in frank and equal partnership with the medical managers, whereby the full coöperation and best results of money and knowledge are more or less diminished; the machine runs with needless friction, and occasionally jams.

That money is of more value than knowledge is a vulgar and erroneous notion; yet in our partnership too often the lay manager presumes that the physician or surgeon is at the hospital not his partner but in some sort his servant. Occasionally indeed he ventures to depreciate the equal benevolence of the medical services, on the ground that if unsalaried they "pay" in profit and reputation. But do we find that in other professions public officers—as a clerk to justices, for instance, as a solicitor to a great banking company, as a consulting engineer or chemist to gas or water works—are unsalaried, because the office carries with it opportunities, reputation, and fees! By no means. The other

day I asked a distinguished physician and a distinguished surgeon on the staffs of two leading London hospitals if it paid them, however indirectly, to devote thus their priceless services for the sick, and for the raising up of successors like themselves? They answered almost in the same words, "The time I give to the hospital costs me 20 or 30 guineas a week"—surely a more than ample pecuniary recompense for any promotion in earlier years. Moreover, even in London, and more generally in the provinces, a man of parts and address, starting independently of a hospital, has opportunities of material gain on the average as good as, and far quicker in return than, those of his fellow student who, more disdainful of commercial balances, at the hospital devotes himself in the first instance to science and charity. Yet it is on these men who love the work that the virtues and the honours of a great hospital chiefly depend.

Let us put it more plainly; a layman, with a purse in his hand, and a physician stand on either side of the bed of a sick man. The layman offers to spend £5 on the patient if the physician of his learning and benevolence will convert this cash into means of solace and cure. Neither partner is of much use to the sick man without the other. The man with the banknote cannot, it is true, allow the physician to spend the money uncontrolled; yet, on the other hand, without the physician his money would be wasted. The partners, then, are not master and servant, but comrades; and if with many banknotes and many patients a great healing engine is created, the principle of frank and equal partnership is not modified. If the expert, after the manner of experts, is prone sometimes to forget the relative proportions of things, to push ideas beyond the limits of common sense, to be importunate, or even extravagant, the layman on his side is as prone to be domineering, meddlesome, and short-sighted. Everything in the healing machine costs money, and the layman, who makes great sacrifices financially, must regard the ultimate economy of it; but, as everything in it is also therapeutical, whatsoever he may do or avoid affects more or less directly the treatment of the patients; whether it be, let us say, the heating and ventilation, the decoration of the walls, or even the baking of the bread and the quality of the blankets. Unless, then, the lay manager keep incessantly in

touch with the medical he will continually make little mistakes and large blunders. Now do we, generally speaking, find such broad and continuous counsel between these partners in large hospitals? Do we not too often find on the contrary a lay board shutting itself up by itself, and week by week proceeding to business without continuous touch with the honorary staff; acting indeed sometimes as if the staff existed only to do what it is told; a custom surely discourteous and wasteful, as well as mischievous to the business the two partners have at heart. How, then, should concord, mutual understanding, and harmonious and efficient coöperation be maintained? At the Leeds General Infirmary every member of the honorary staff is, *ex-officio*, a member of the weekly board; thus at every board one or other of the staff is sure to be present, so that if any innocent-looking proposal arises which in so complex a machine might react prejudicially upon the welfare of the sick, a warning note is heard, and the proposal is deferred or modified. Larger issues are discussed, on due notice, by full boards of lay and medical members, with frank and equal interchange of opinion; but the staff vote is properly limited,—in my day it was to eight, these votes being readily distributed among the staff at the discretion of the members present; votes being, of course, allotted first to the members of the departments especially concerned in the issue. The result during my experience was that no cool breezes chilled the cordial partnership between board and staff in that successful hospital; nor was there any loss of efficiency by want of touch, cross purposes, or conflicting opinions.

The next counsel I would offer is that a lively and effective sympathy be manifested with scientific aspiration and invention, even by lay managers who may be unable to see the bearings or object of particular researches. To speak personally, I shall never forget the almost comic astonishment of a certain weekly board to which, some 40 years ago, I appealed for a very modest outfit of electrical scientific apparatus, and at a later date for means of registering surface temperatures by electrical thermocouples, of recording continuous curves of bodily temperature by watchwork, and so forth. Bit by bit I did indeed get something of what I wanted, but with a delay and tediousness that crippled my endeavours. Now, I pray you to believe that no money is better expended

than moderate sums allotted to investigation by young men of scientific ardour whose education in method is fairly adequate. If it does little more than keep the junior staff and their pupils active, curious, and attentive, the outlay has its ample reward.

#### CLINICAL PATHOLOGY.

And thus I am led, not merely to urge in general terms the alliance of clinical medicine with scientific research, for this is a counsel not needed in Manchester, but to advocate in particular a far closer intimacy and coöperation than at present exist between the physician and the pathologist. Since a few of us, some years ago, began to urge the creation of clinical laboratories close to the doors of the wards, a little has been done no doubt; but in most places it has been done, in my opinion, awkwardly and very partially. Herein I think the medical manager, as sinning against the light, is more to blame than the lay; so that the pathologist—I speak not now of morbid anatomy which has long enjoyed every advantage, but of pathology in its dynamic aspect—the pathologist in this sense is kept aloof from the patient whose processes it is his main business to interpret; and the physician, with morbid anatomy nearer his elbow, has been losing something of the sense of disease as dynamics, which, with all their fantasies of vapour and humour, was apprehended by our ancestors of the last two or three centuries. Of late years a remarkable integration has begun, and is rapidly proceeding, between anatomy and physiology; and, if medicine is to advance as it has been advancing, the same integration must be created between static pathology, medical practice, and dynamic pathology—the pathology of processes. That the pathologist must investigate the sick man in whose body these defects and perversions are at work seems too obvious for assertion; yet when some few months ago I asked, somewhat ironically I fear, of a distinguished pathologist in a great university if he had free access to the wards of the hospital, he replied, "If I were to set foot in the wards there would indeed be a pretty hubbub in the staff." So the pathologist, at arm's length in a laboratory down the street, working, as it were, in a balloon, and fed upon occasional crumbs from the hospital table, never sets eyes upon the concrete problems which it is his business to solve. There

seems to be an opinion abroad that the pathologist, who may never have approached a patient since his graduation, can by some esoteric ingenuity put together the conditions of these problems in his laboratory; or indeed under these purer conditions find more comprehensible explanations. To endeavour in the laboratory thus to reproduce problems in simpler terms is no doubt a valuable part of scientific method; but surely it is a truism that such researches, unless incessantly brought to the touchstone of nature, are apt to lead to conclusions as abstract as the ingenious conditions out of which they arose are artificial. In the simpler sciences, it is true, such methods go farther; a mathematician, in no way conversant with machines, may be indispensable to the engineer; but even in the simplicity of mechanics the shortcomings of mere academic methods soon become conspicuous: how much more crippled then must be the academic pathologist who is denied full conversance with those infinitely more complex and multifarious machines we know as plants and animals! It seems absurd to labour such a point as this, and in a university so vigorously empirical as Victoria; still as we have long ceased to be surprised at the absurdities which convention and tradition maintain even in the hardest heads, even here these counsels may be useful.

How, then, are we to abolish so fallacious a distribution of work? The physician, who in the earlier phases of scientific medicine proved himself, on the very principles just proposed, to be the ablest of pathologists, can no longer, in the vast extension of the field, devote himself fully to pathological research. It is all he can do to carry the application of its discoveries into clinical practice. Moreover, the field of qualitative clinical work is filling up, and progress now depends on the far more arduous and exacting quantitative appreciations. Both physician and pathologist, each by his own methods, must work in the ward, at the facts; the pathologist must have almost as free a run as the physician—almost as free, for ultimately, of course, the physician will govern all that concerns the patient's well-being—and must accordingly have a laboratory of first instance in the neighbourhood of the ward; his departmental and research laboratories will, of course, be elsewhere, yet not so far away as to estrange him from the patients. By this concert the outlook of the physician also,

his assistants and his classes, would be continually enlarged, and the attention of the pathologist as continually riveted upon those signals, criterions, contingencies, interdependencies, exceptions, eccentricities, lapses, glimpses, which in the laboratory no ingenuity can forecast or reproduce, but which are coy nature's stratagems. "Οὐτε λέγει, οὐτε κρύπτει, ἀλλὰ σημαίνει."

And what is true of the hospital is no less true for private practice. It is not fair to the pathologist, it is not fair to the patient, in cases, let us say, of biochemical disorder, of vaccinal therapeutics, of obscure toxic processes, and so forth, to pick the brains of the pathologist at second hand. The pathologist should be summoned to take his proper part in consultation with the family physician, and any other consultant, all upon equal terms. So far as circumstances and the old customs of private practice permit, it is my endeavour to bring this about; and, if expenses must be kept down, the medical consultant may be permitted to resign a few of his visits to the pathologist, who, by the way, is anything but a rapacious person.

#### OUT-PATIENTS.

Of the departments of a great hospital that which is most rudimentary, rudimentary almost to chaos; that in which the evil, which in this world attends upon the good, survives most manifestly, and is perhaps increasing; that which on many grounds is open to the censorious comments of medical men outside its walls and of the public, and indeed of the hospital staffs themselves, is the Out-patient Department. Physicians resent all that savours of quackery, at any rate in medicine; yet is there any custom more apt to engender and to foster quackery than to encourage mobs to wander round our halls for potions to be hugged to their bosoms as charms? In not a few cases, it is true, these herbs and salts have some virtue; but in how many are they not stock recipes, either wholly futile or at best impotent as auxiliaries against unwholesome habits and conditions of life which the physician, unable to ameliorate, gets weary of denouncing? Too soon he learns to say to himself, "Poor creatures, errant or sinful, God help them, I cannot; yet if pill or potion be a comfort to them, or a hope, by all means let them have it." And the quackery

does not end here; unhappily it permeates into the higher social ranks, to the degradation of scientific therapeutics.

In respect of the out-patients, hospital abuse, by persons able to pay for advice, is perhaps exaggerated; still, by direct provision or by means of provident dispensaries, some of them might be induced to obtain the more individual and discriminating aid of physicians living among them, conversant with them and their ways, and with the external causes and conditions of their maladies. Thus, by treatment of a more comprehensive kind on physiological lines, vulgar notions of the laws of life and disease would be enlarged, and some health would be compassed not for the body only but also for mind and character.

Hitherto I have been considering the out-patients of Great Britain as hordes; but at the same time I am not forgetful of the precious gifts of diagnosis, and even of treatment, which thus fall to the lot of many of them, as to persons overtaken by acute or vexatious diseases, but who, even if fully aware of the nature of the case, are unable or unprepared to pay for medical aid. Many sufferers are thus consigned to the wards, and on discharge are kept still under supervision; others are benefited by topical remedies, specific drugs, or elaborate technical methods, such as massage, electricity, x rays, or medicated baths, which in general practice are out of reach. Again in respect of diagnosis, there are poor patients as well as rich whose maladies are obscure in nature or difficult to manage; patients who may have made, and be making, payments to a medical man, but are quite unable to add the fees of a consultant, or the charges of costly methods of cure. Even in the poorer families of the middle classes serious illness is a grievous or even a crippling expense, especially in these days of elaborate and costly therapeutics, against which some more orderly provision is sadly needed. And as things are, these important cases are more or less swamped by the horde.

How, then, is the out-patient department to be organised for efficiency, and with respect to the physician in general practice, who in these days has become far too competent a man to be ignored? Time permits me to consider one part only of the problem. It has been proposed that access to an out-patient department shall be only by the introduction of a medical man in the district. This is too narrow a proposal.

To deny ready relief to the sick and needy who have no physician, may know none, or in any case are unable to pay for his intervention—in cases, for instance, of incipient acute disease, of infections, or more insidious maladies—would not be, and ought not to be, tolerated by the public, whether in the name of charity or of civil order. Moreover, the delicate question must arise, How fairly the general practitioner would play the game? As things are, the ill-paid “club doctor” often, and not unnaturally, declines to add to his bounden duties; nay, the physician who resents a hint at “further advice,” or sniffs at it when obtained, is not quite extinct. Again, what about the time, the trouble, the miscarriage, and the comparative ineffectiveness of brief notes or messages?

The proposal as it stands, then, is narrow and impracticable; yet it touches an important principle, especially as regards cases of difficult diagnosis, those again which need costly methods of cure, and afflicted persons who have paid fees but can pay no longer. To encourage family physicians to refer patients of these two classes to the hospital is then the duty of the managers; and for the cases of difficult diagnosis or treatment I suggest that the need would be met by the appointment at every hospital, and in each department, of an invariable hour when the outside physician and his patient could rely upon a consultation with one or other of the honorary staff in his respective department. These hours should be fairly frequent and invariable; the busy practitioner cannot be counting days and hours, he must be able to say offhand when John or Mary shall meet him at the hospital gates. There he would probably encounter others of his brethren on similar errands; and, if all could join in each consultation, they would derive as much of interest and experience for themselves as of advantage for their patients. Such a system would surely extend itself in many incalculable ways; it would offer a fertile field for the younger consultants, raise the value of medical methods in the eyes of the public, and tend by example to reduce the burden of hangers-on and of routine prescribing among them, and even, perhaps, the vague discontent and quack-hankering among the well-to-do. I will only add that on the medical side provision should be made for consultations in mental diseases.

## MEDICINE AND THE STATE.

There is no doubt some discontent in our profession that Medicine has not the rank and consideration which are its due ; such as are accorded for example to the Church, the Law, the Navy and Army. Now in so far as any such uneasiness is engendered of petty personal ambitions we need not dwell upon it longer than to recollect that we shall attain to the social consideration we may deserve by the self-respect which ignores the trivial conceits of the day, which is quick to think for others, slow of offence. But this is not all. The physician, if a somewhat touchy person, is not arrogant ; the discontent lies deeper and springs from more honourable motives ; from a nobler jealousy for our calling, its achievements and services ; from a restless sense of great powers not finding their full play and responsibility in the national functions and counsels. Thus regarded, our discontent may be justified, and desire only what is due to the honour and interests of the commonwealth.

Now there must be some reason, if Medicine has failed hitherto to rank with the other great services, why this is so. The answer is not difficult : that in so far as we are concerned only with individual pains, in so far, as some naughty wit has put it, as we are but plumbers and glaziers of the individual body, we have neither place nor claim to public recognition. It is in respect of our concern with the larger issues of public health that our service and responsibilities become national functions. In this respect, however, until yesterday and to-day, we had not the knowledge to justify our vocation. The history of Medicine, broadly speaking, is melancholy reading ; it is a record of devastation by pestilence, deplorable blights upon family life, and catalogues of medical formulas and practices as prodigious as the plagues before which priest and physician alike vaunted themselves in vain. Open the pages at hazard, perchance at John Evelyn's story, but a common instance of a common fate. Of Evelyn's nine children only a son and a daughter reached adolescence, and one of these, in the words of Jeremy Taylor, "that pretty person your strangely hopeful boy," was then cut off also ; the daughter alone survived him. The royal houses of Europe, time after time, were stricken or blighted by swift death, as was, for instance, the splendid

house of Lewis the Fourteenth; so that again and again the air was darkened by rumours of foul play. As in some classes even yet, in all classes then, such disaster was rather the rule than the exception, and the people went upon the facts accordingly: the fighting men, they more or less consciously argued, make us into a nation; the lawyers bring order into our midst; the Church has fostered learning and religion; it is the no less high vocation of medicine, before commerce, before other subsidiary ends, to protect and fortify man's body, the tabernacle of all this prowess and this wisdom—the tabernacle, do I say? nay, in the words of Dr. Caird, St. Paul's dramatic contrast between the flesh and the spirit had but a temporary and rhetorical meaning, like the contrast between matter and energy; the body, spiritually considered, is the immediate organ and instrument of the soul. To maintain this organ and instrument, not in the individual man only but in the social body also, was the vocation of medicine; but science had hardly come to the birth, and applied biology had not even been conceived. Medicine could not humbly wait for science, as science waited for the experimental method; competent or incompetent, she was forced into action. Her pontiffs, therefore, strewed before the people withered branches of tradition, and the Dead Sea fruit of a curious but mostly grotesque and unregenerate folklore. Indeed in the middle ages great men could not fight for clear causes; they were confronted not only by truths in array one against another but also by monstrous regiments of error and fiction; regiments to be mown down by the artillery of experiment, as feathered savages before the hail of the machine gun, but till then irresistible. Not till our time, and with these arms victorious, could medicine advance; but now it is moving so quickly that, borne upon the moving mass, we do not perceive the speed until we look back to see whence we have come. The belated knowledge is ours at last. To-day we can answer bravely to our invocation. We are commanding the ear of the nations and solving their problems with deeds and revelations so triumphant that, in their quandaries, even our unidea-ed governing classes, who had fallen to a belief in "compromise not as politics but as an excuse for routine," and had satisfied themselves of the efficacy of ignorance, are now compelled, bit by bit, to yield us some brusque and clumsy heed, to bully and

then to knock under. For from the hands of our leaders the kings of the earth and its merchants have received the keys of Suez and Panama, the gates of the hemispheres, their wardens, the twin ogres of malaria and yellow fever,<sup>1</sup> being by our art if not dead yet toothless and impotent as Pope and Pagan ; we have tortured the secret out of the demons of tuberculosis, sleeping sickness, plague, Mediterranean fever, wool-sorters' disease, cerebro-spinal meningitis, tetanus, syphilis, puerperal and surgical fevers—need I prolong the list of these modern discoveries, so brilliant as to shine best by their own light?—and where we have not yet extorted the whole secret, as from smallpox, scarlet fever, infantile diarrhoea, hydrophobia, we have so far mastered the tactics against them as to be reducing them to phantoms of their former malignity. Sadly late then as we have come into the field, we are in time to be the saviours of the nations as well as the guardians of the family ; and to endow mankind with vast and fertile territories hitherto under the desolation of disease. Yet to be ministers of a newborn profession is not all loss. When Athene sprang full-grown from the head (and heart) of Zeus, were not the Olympians at first a little disdainful and aloof, and the divine maid a little wondering and shy? And probably the aegis was not quite ready ; these artificers are always behindhand. Is not Medicine, born full-grown from the womb of our own time, if a little wistful at first, spared the hamper of a long past? Her gospel is not hidden behind an ancient and creaking machinery, nor is she buried under a huge inheritance of undigested facts and opinions. The engineer, it is true, is a new demi-god ; but he deals with far more elementary things, with means, not with ends. Joyfully we are putting on a hundred legs for one in the hope of escaping from ourselves, yet so far it seems very much in vain.

#### MINISTRY OF HEALTH.

What is now needed in England is no halt by our leaders, but the establishment of a General Staff of Medicine, to rebuke the purblind and inveterate habit in our countrymen of devoting their magnificent energy and their treasure to mopping up effects, in disregard of causes ; to teach them better than to

<sup>1</sup> To yellow fever in Havana, year by year for some 200 years until 1903, about 750 lives were sacrificed. In the last three years not one death from this plague has been recorded there.

hustle each other with fussy, belated hurrying to and fro after evils have surged to a head, as, for instance, in the calamity of plague in India and in the typhoid disaster in South Africa: calamities no longer mysterious; noonday pestilences concerning which the modern physician had ample foreknowledge. Yet with all this knowledge, and infinitely more parcelled out in the several closets of the older ministries, or submitted to the patronage of selfish and awkward local authorities, generally coarse and inconsistent in their methods and sometimes corrupt, Medicine, as a function of the State, is still working as it were with her left hand. Her scattered official members have no unity; working everywhere piecemeal she has no coöordination, no integrated self-consciousness. With no fixed apparatus for concerted action, energy is wasted in overlap, in jostling, in divided purposes, and in anomalies. Although her influence is penetrating into almost every function of society, and directly and indirectly she is spending a great revenue, yet she passes through the councils of the nation veiled and irresponsible. The new ideas which are stirring society are largely medical, yet society does not know where, in the back staircases or garrets of the Local Government Board, of the Home Office, of the Colonial Office, of the Education Office, of the Board of Trade, of the Post Office, of the Registrar-General's department, of the Lunacy Commission, and so forth, each bee buzzing in its own little cage, medicine is to be found; nor how this new solvent and all-pervading influence is to be brought to the book of revenue, or to the bar of public opinion and responsibility.

*Our charge.*—Let us consider, but for a moment and in outline, the charge of medicine in normal national functions. Abroad, Public Medicine, though still obscured by the taint and clatter of "hygienic" trade advertisements, Public Medicine, to which hereafter private practice will have to play a tributary part, has stretched out its arm beyond the several nations, is transforming the quarantine of man, animals, and plants, and creating a vast and masterful international service. At home, to public medicine is intrusted, in the first quarter of life, the reckoning of births; the protection of infant life and growth; the valuing of each generation by comparison with the past and with normal standards of physiological institution. The new undertaking of medical school inspection, a far-reaching

measure the full purport of which as yet the country has but little notion, the physical and mental conditions of education, the "half-timer," and night-school problems; in later life the conditions of labour, the dynamics of food and the minimum wage, the how and the why of premature old age, the effects of degrading and stupefying labour, and the time incidence of old-age pensions, and sick insurances; factory inspection, with estimates of the effects of particular trades, such as chemical works, mining of all kinds, metal grinding, and so forth, with their consequences and pecuniary compensations; and, more broadly, the large problems of "eugenics," of housing, of home life, of ventilation, of water supplies, sewage, and rivers pollution, of food markets and adulteration, so rampant in England, and furthermore those amenities of life, especially in cities, which, by their play upon the receptive organs of the mind, make for the temperance and harmony which are essential to health and function: these and such as these, in the sphere of the normal, are but a part of the functions of modern medicine.

If now from the normal we turn to the abnormal, we may as rapidly survey not only the tides of epidemic diseases, in the largest sense of man, animals, and plants, but also the more chronic but no less mischievous diseases which depend upon defect or vitiation of the conditions of social life: the proclivity to reversion and degeneration which is the shadow of evolution; the prevention and treatment of feeble-mindedness and insanity, which after mountainous waste of means is hardly begun; the great adventures of hospitals and sick asylums; the urgent problem of a provision for medical and surgical treatment for large classes above the very poor, upon whom long and costly illness falls with a crushing weight, and for whom in any case the expensive and elaborate therapeutical apparatus of the great hospitals are not intended; the working of the Poor-law; the campaign against drunkenness, fornication, and other venomous social vices. Thence we may pass rapidly on to criminology and punishment; to toxicological and expert medical testimony; to the anomalies of coroners' courts, which in the crudity of their procedure would seem to exist rather for the destruction than for the corroboration of evidence; and finally, to the antiquated and distrusted dogmas of the judges of the higher courts on responsibility before the law.

Now this is the baldest of sketches, yet does it not indicate that modern medicine is embracing not indeed the final purposes and issues but the springs and conditions of human and universal life and efficiency; yet while the central administration remains as acephalous as the peripheral parts are multifarious and incoördinate, can we wonder that ignorance, confusion, and vacillation still prevail? The medical officer of health is at the mercy of the caprices of any interested clique; his sphere is undefined, he has neither protection nor freedom. In his service there is no order of promotion, no assurance of pension. Thwarted in detail, and in no public coöperation with a consolidated service, he is apt to lose standards, to lose efficiency, and to lose heart. Without an organised State Department, Public Medicine lacks the corporate sense of a great official body like the Law, and the stability of the more coherent social groups which are favoured by natural selection. Moreover, being but human, its partial conceptions, cross purposes, and pedantries remain unmodified; its naturally strong positions are not fortified against lay criticism, and the public does not get at home with medical ideas and practices. Working behind the scenes, it loses the discipline and the chastisement, as well as the honour of public responsibility; while in the words of the President of the Royal College of Physicians of London,<sup>1</sup> "the State thrusts upon us responsibilities which are not ours." Unrepresented by a Minister of its own in Parliament, by alien Ministers it is alternately used and betrayed; and in silence must submit to hear its motives misinterpreted, its methods mishandled, and its unrequited labours continually imposed upon.

To one more factor of medical organisation I can but allude, although it lies at the root—I allude to the making of knowledge, knowledge of all national stores the most precious, in spite of the overlords of society who, as I have said, are still clinging to a belief in the efficacy of ignorance and delay. Grave towards us as are the faults of the Local Goverment Board, we must gladly admit that in this department some research is fostered. It is clear that there must be administrative laboratories, and that without the atmosphere of disinterested

<sup>1</sup> *The Lancet*, Oct. 5th, 1907, p. 945.

research the best laboratory must flag; still it is open to inquiry how far the State shall make knowledge for itself and how far it shall derive it from universities and other scientific bodies. But when, for science or for art, money is wanted we discover that we are the poorest nation in the civilised world.

What are we to propose, then, in reform of the services of public medicine? I understand that in high quarters the desire is to begin with the chaotic and inefficient periphery, in the hope that, secondarily, evolution may reach, recreate, and coördinate the subcentres and the main centres. It is urged also that each department must have its medical bureau for its own continuous guidance and instruction. Again, there is the conventional dread of medicine as of all irresistible knowledge; and a proneness to the sinister device of "*Divide et impera.*" Besides the English public has a wholesome dislike to the multiplication of officials; but by organisation the number of officials at any moment would be diminished rather than multiplied. It is true that each department would still need its own standing medical counsel, as it now has its standing legal counsel; but how far more valuable would such a counsellor be when speaking from the consolidated opinion of a corporate and disciplined public medical Ministry, or at any rate of a powerful parliamentary and official body such as the Law, than as an isolated medical expert expressing no more than private and individual opinions. The need of reform in the separate peripheral areas is urgent, it is true; nay, Dr. Bushnell<sup>1</sup> is correct in attributing to me an "apprehension of harm in excessive or premature centralisation, lest the central machinery be too powerful for the peripheral equipment"; but, on the other hand, without parallel development, coördination, and distinction of central powers, how are local authorities and local medical officers, in all the far-reaching and various departments of national function now being intrusted to them, to derive their instructions and judgment, to command attention, to be furnished with knowledge, to be inspired with earnestness and devotion to duty, and to be supported by an instructed public in their legitimate functions.

<sup>1</sup> *Brit. Med. Jour.*, August 24th, 1908.

## CLINICAL PROFESSORS.

In passing now from hospital and public medicine to the school, I would congratulate this University on the recent appointment of responsible professors of medicine. The rich services and the accomplished staffs of the London hospitals fall far short of their potential capacity because in this respect everybody's business is nobody's business. By general report, by the uneven quality of the clinical training of Cambridge students in London, and by personal comparison of the services in great continental hospitals, or, indeed, of the Edinburgh Infirmary as it was in the days of Begbie and Stewart when I knew it best, and as no doubt it is still to-day, I note in foundations so magnificent as the half dozen chief London hospitals that their defect of responsible clinical professors results in grave shortcomings. The apprenticeship system died out and no other methodical system took its place. Admirable are the gifts, devoted are the sacrifices of individual physicians and surgeons; and by such virtues this member of the staff or that gathers for a time a fairly regular class about him; yet he is but an unpaid or ill-paid volunteer, whose personal and private interests must be his chief consideration. None of the senior staff is invested with specific duties and responsibilities. Thus, as a whole, the teaching is without system, without concentration, without definite standards. At the best it is a procession of brilliant episodes; in the mean it is casual drills under no commanding officer. Where in these great hospitals do we find, as in France and Germany, a Clinical Professor, of experience no less ripe, by repute no less eminent than his English brethren, devoting the best of his golden hours to the hospital; making and controlling his assistants, guiding his classes in research, and working out his own problems leisurely before their eyes? In our visits to great English hospitals do we not more frequently see the great physician or surgeon flitting rapidly from bed to bed, hemmed in by a crowd of foreign admirers, dropping indeed as he goes pearls of wisdom, but educating nobody. His seed thoughts we pick up thankfully, but still we want also the curious, the leisurely, responsible professional teacher; such professors as you fortunately now possess in Dr. Graham Steell and Dr. George R. Murray.

## MEDICAL STUDIES.

Although in my little book on "Professional Education"<sup>1</sup> I have dwelt at some length on medical studies, yet the present occasion and the recent discussion at Sheffield seem to call for some reiteration of opinions for which hitherto I have obtained more attention outside our profession than within it. I hope it is a pardonable conceit on my part to surmise that, had they been noted at Sheffield, the discussion would have moved towards clearer issues, and led to more definite conclusions. To-day I can but touch upon the central problem, the evasion of which at Sheffield gave an arbitrary character to what might have been a very important debate—namely, *the relation of university to technical study*. When directly challenged, all competent observers admit that education does partake of these several qualities; and that however conflicting or commingled in practice, the virtue and functions of each must be separately discriminated, valued, and compared. Moreover, it is generally admitted that as university education, looking as it does to the individual and to the future, is apt to be thrust aside for technical equipment which is for immediate gain, the cause of individual development and future knowledge should be the more jealously guarded. Forgive me if under limits of time I put the matter bluntly. A father says, "I can spare neither the time nor the money to give my son a university education, in the proper sense; indeed, I am not sure that I desire it; I do desire to make a special workman of him, and this as soon as possible; all beyond it may bring in no more than its own reward. Yet, as many universities have been granting medical degrees on diploma standards, and for training no more than technical, these degrees have become an indispensable business asset; consequently my son must have the stamp, not as a mark of a liberal education, about which I am not now concerning myself, but to testify to good average technical attainments. Specifically, I mean that every candidate, competently instructed in the art and mystery of medicine, must be furnished with an M.D. degree." This is the idea now prevailing in our profession, and the claim is a serious one; perhaps, in the tangle of these

<sup>1</sup> Published by Messrs. Macmillan, 1906.

matters, irresistible. At any rate, as things are, it has my sincere sympathy.

There is, however, no inconsiderable part of our profession which goes not quite so far. This party, while still regarding the curriculum as narrowly from the technical point of view, would, however, hold back the university degree for a minority of candidates who have distended their minds with a bigger content; though still of technical stuff. With this party I have less sympathy, little or none. If for mere technical instruction the world compels us to give the seal of a university—that seal which ought to attest a disinterested education, aiming chiefly at the making of the man himself—well, we have the recognised excuse of duress. For in the past technical medicine has edged its way into the machinery of the universities as no other technical instruction has done. Save in this anomalous case of medicine, universities have never regarded themselves as engines for the manufacture of professional men as such. The parson is made in the seminary and the parish; the lawyer in chambers and court; the soldier in the field; the engineer in the workshop, and so on. To none of these does the university give the seal of practical expertness; it testifies to the individual development only. By this anomaly in medicine our conception of a liberal education has been so warped, or at any rate so confused, that university degrees on diploma standards may be inevitable. But, I repeat, I can feel no sympathy with the party which, by withholding the degree until as much of this erroneous conception as possible may be accumulated, would give our principles away more completely, and force the universities to the manufacture of pedants. For the more intense the specialism the deeper and broader must be the universal foundation. The function of the university is to make the man, and to open his mind to many-sided views; and if the man be but half made—I am speaking, of course, of the average student, not of the genius who makes himself—the greater burden upon his back serves but to exhibit the slightness of his frame. A technical instruction cannot by mere length and toughness become a liberal education; yet herein the Sheffield discussion reminded me of the old comparison between rheumatism and gout: turn the thumb-screw till the pain is intolerable and you have rheumatism; give it another turn or two and you have gout. So with

study : by turning the screw beyond the already exacting pressure of the medical schools we are to convert the technical into a university education. Wince from the truth as we may, a liberal or university education is primarily of different scope, and means a different method and course, not at the end of the curriculum but from the beginning ; the professional school, however exacting, educates the average physician not otherwise in principle than the clerical seminary educates the average clergyman.

But, it may be urged, if we can entrust a university with our technical training, and can set an hospital in the middle of it, shall we not get the best of both worlds ? Will not universal methods and scholarly standards mould the technical methods on lines which, if not as generous as could be wished, may yet be fairly ample ? Can we not by modifying university standards and forcing up technical machinery attain a certain efficacious mean ? Now it is a little irksome to me to contest this proposition, for in former addresses, before audiences too much wedded to abstract academic methods and prone to edge away from concrete processes, processes which no laboratory ingenuity can imitate or even conceive, I have urged that, Antaeus-like, knowledge must continually be recharged by earth contacts. Universities are no longer to be the cloisters of subtle and fastidious persons, observing the wind, and all a little afraid of each other. Albeit this return to the realities of life is not to be for the accommodation of mean positions, but for the achievement of higher standards and still wider knowledge. The mean position, as social history tells us, and biologists are illustrating, is a position not of advance, not of growth, but of retrogression. As Professor E. H. Starling said, we cannot get a quart into a pint pot ; but by these measures I would figure, not the potential capacity of the student, but the stricter capacities of our respective methods. Not by any shift can a pint method be dilated into a quart method ; the pot may be filled to the pint peg only, if no more can be afforded, but if it is to hold a quart it must be designed on the lines of the quart from the commencement.

There is no escape then from the unpalatable truth that if a liberal education, the education of a university, the making of the man, is to preside over the making of the particular

professional man he must pay the price. Be the technical requirement of time what it may—five years, say, or six—if the original capacity of the individual is to be brought out, if his personality is to be developed before, and also hand in hand with, his adaptation as a special instrument, some farther enlargement of time and opportunity has to be given and paid for. Narrow circumstances may deny it to him, they deny us many excellent things ; but in this case the average man will never fully find himself, he will be designed as a receptacle and a retailer, and on the lines not of a progressive but of a stationary practitioner. “ We cannot know fully what is enough until we know what is more than enough.”

#### CONCERT OF METHODS.

Happily, however, with some mutual adjustments, the creative and the instrumental methods may be combined, and the double price in time and money reduced. The function of a university is to be the maker of the man as a whole ; it cannot properly be made responsible for his technical efficiency as a practising lawyer, a practising parson, a practising physician, as a soldier or an engineer in the field. Nevertheless, the principles of theology, law, medicine, military history, mechanism, and the like are properly taught in universities ; and herein it is that university ideas and the hard-pressed student and his guardian may approach each other. For, to develop the individual faculties, and to create the man, almost any subjects can be used, if used thus as universals ; not as particular equipments, not as furniture, but as disinterested means of unfolding the secret powers of the mind. Yet it is at this very crux that Professor Starling would desert us. If I read him aright, he would, while in the university, retrench these convenient studies from educational to instrumental purposes ; thus neutralising the very principles on which an accommodation between liberal and technical ideals is practicable. For instance of anatomy, the university, on his suggestion, is no longer to teach anatomy as a means of culture—a disinterested anatomy to awaken and develop the general faculty of exact observation, and to imbue the mind with broad morphological and genetic principles ; instead of this disinterested study, sections useful

to the future craftsman are to be extracted ; neglecting the development of faculty we are to confine ourselves to the inculcation of immediately useful parcels. This is indeed to shape the instrument before we have forged the steel. I have never forgotten the day when Humphry put a bone into my hand and revealed to me as an undeveloped youth what scientific observation meant ; it meant not just points for the surgeon, for surgery then formed little or no part of the Cambridge curriculum, but a training of faculty, whether for the physician, the naturalist, the physicist, the grammarian, the palaeographer ; in a word, for universal education. Thus one is taught how carelessly the untrained eye skips its reading. Had I been told to note only what I might happen for some practical purpose to want, and to skip the rest, I should never have been convicted of the sin of inaccuracy ; the eye would have fluttered unchastised over many a tiny point, which afterwards, when the mind had been raised to the conception of principles, would have disclosed itself as an "expression point," significant of cycles or deviations of growth which otherwise had left no trace. "To look with the eye confounds the wisdom of ages." Moreover, in the unforeseen future, as we have seen for instance in the field of modern neurology, it is the anatomical habit of mind, apart from the memory of details, which in great part gives his lead to the successful pioneer in new regions of observation. Such in anatomy is an illustration of the contrast between universal and technical methods, but such also are the potentialities which enable us to use almost any department of knowledge for an education of universal quality.

Secondly, if time be gained by using kindred subjects for the general education, we shall find other gains also at a later stage. The maturer and more various the qualities the mind brings to bear, the more quickly and truly will it judge of what is to come before it later. The technical teacher's ideas have not to dwindle into the dimensions of a rudimentary disciple. The instruction, which it is his turn to give, falls upon a mind already familiar with standards, with principle, with relative values ; a mind accustomed to observation, comparison, and foresight. Moreover, among themselves, such educated students do not, as those who are only of the workshop, operate upon each other at common levels, but

they stimulate each other with methodical inquiry and some critical judgment. In the search after truth their minds have found themselves, for this search is the path of life: they are awakened to that sense of our ignorance which forbids us any satisfaction in phrases and conventions; which tells us that none of our axioms is true, though truer than an indolent or gregarious assent, and guards us against the domination of the many positive persons who do not know but only assert; such as the historian of whom Acton said that "a little study of the subject would probably diminish the severity of his judgment and add materially to its weight." For students thus previously developed technical attainment is greatly accelerated.

Thirdly, we may gain time for an enlarged curriculum by requiring more of the secondary schools, and by encouraging our students to come up a little younger. At Cambridge we have decided to offer the First M.B. examination to candidates on entrance, so that they may proceed at once to more advanced methods. In the Sheffield discussion Dr. Dawson Turner was jealous lest thus the literary side should be starved; I have perceived but little on this side to starve, but in any case may we not have an equal jealousy of the literary schoolboy starved of science? The elements of science required for our First M.B. are of the kind which should enter into the formation of every educated man.

Much, then, may be done by preparation, by consolidation, and by adaptation, to fit together university and technical education, mind and dexterity; but no consolidation, no contrivance can make them identical or equivalent. Whatsoever may be the time prescribed by the Medical Council for qualification, the student who desires to build up his faculties and stiffen his judgment by a more universal training must add a year or two to the technical minimum, and this from the beginning of his course. It cannot be tacked on at the end of it.

Is it not, then, deeply to be regretted that a great Lancashire merchant, a man of energy and powerful in material progress, should use his influence to declare that "a university education retards a young man's progress in commercial life by occupying years in the study of classical and other subjects when commercial training would be more

valuable." Now he must be a very dull or a very complacent observer who supposes our modern industrial civilisation to be hitherto a great success ; still what an abasement, surely an unmerited abasement of commerce, for which ancient calling this and other universities are now giving new opportunities, to suggest that it is all trivial ; that it is incapable of principles, of high standards, and has no uses for an education which stores the mind with liberal knowledge and opens it to new and various ideas. We have seen that a disinterested building up of mental faculty is not a matter of this study against that, whether of literature, of social and commercial economy, of physical science, of history, and so forth, but of the larger manner of its handling ; that university training does not consist in decorative accomplishment, nor in disdain of common things, but in an openness and a flexibility of mind to new ideas and issues, in the spirit brought to the study of everything ; for although in nature nothing is common, no thing is smaller than another, to the common mind everything is insignificant. Herein the American surpasses the English plutocrat ; he sees beyond the counter, he has faith in the best knowledge in every field ; we have not this salvation. Let me contrast with such complacency the words of a teacher even more considerable : " You are citizens of the great and mighty city of Athens (a city by the way mightier than any of ours) ; are you not ashamed of heaping up the greatest amount of money and honour and reputation, and caring so little about wisdom and truth, and the greatest improvement of the soul, which you never regard or heed at all ? " German commerce is teaching us the bitter lesson that even in his own material field your " practical man " over-reaches himself ; that his " good workman " is unable to investigate even practical problems, to appreciate the discoveries of others, or to teach his apprentices. If he is to transform human energies into the best material results the practical man must have the best kinds of minds at his service ; not merely the handy man, sharp and resourceful enough in ordinary emergencies, but of no insight and no horizons.

#### PORTAL OF QUALIFICATION.

If then a university degree is to be exacted for a utilitarian teaching which, if it is to occupy only the time officially

prescribed for a diploma, cannot be moulded upon university standards, we shall lose sight of the first principles of all education, and barter away the foundation of medicine herself, as of all progressive knowledge. It has been, however, as I have said, a part of the anomaly of university medicine that for this profession universities have been endowed, or shall I say "saddled," with the duty and responsibility of qualification for practice ; a concern which, as we have seen, is none of theirs, or is theirs only in common with society at large. By the establishment of one portal to the Register the State will, I trust, soon relieve us of this alien burden, and of the duty of tests no less alien to our best purposes. At Cambridge, indeed, I hold that to impose upon those of our M.B.-B.C. candidates who are already on the Register, as are some 75 per cent. of them, a repetition of these diploma tests, is not only otiose, but a grave evil ; it prolongs what Professor Starling well calls the "stuffing" period, the period during which the candidate denies himself the wards that he may sit in his lodgings with a teapot, and a wet towel about his brow, fagging up handbooks, the contents of which, in dilute solutions or on sheets divided into opposite columns of neatly docketed cram, he retails to us over again at Cambridge. Now many of these candidates, as later we find by their M.B. theses, we really had led to think for themselves ; yet in a qualifying examination they dared not venture to betray it. Occasionally an audacious spirit thus handicapped enters a timid demur to a current doctrine or phrase, and if so, from me at any rate, he obtains a good mark, whether his demur be justifiable or not ; but, if I exclude the few riper students who give ampler time to the university, I can hardly recollect a paper in medicine in which a candidate broke away from sheepish assent to conventional notions. Man by man, and year by year, their minds are bent to a safe sterility, and their papers are as flat and as conventional as willow-pattern plates.

#### TESTS OF METHODS.

But it may be urged, are not these remonstrances rather fanciful, rather academic, counsels too rare for a common world ! Well, let us try, as the children say, to prove our sum. We must go beyond the tests of current doctrine and

common formulas, of the capacity of swallow and regurgitation by which our examination candidates amaze us. We must seek a test not of the volume but of the design of the candidate's work, of the power and quality of the human organ we profess to have built ; of the personal character informing his notions. We shall mark whether his argument signifies that his ideas were spun in his own loom, or are all warehouse goods ; if in the accuracy and lucidity of his language he betrays precision and balance of thought. We shall note as highly significant such fresh observations and ideas as should offer themselves on all sides to the quickened eye, the alert intelligence, and the hand familiar with methods of precision.

Whether in current medical writing the qualities of the university graduate are as evident as they should be, it might be ungracious at present to inquire ; and I must not assume the truth of the recent complaints that English Bachelors of Science, when they visit Germany, are found to be instructed so much on books and laboratory clerking, and so little on personal initiative, that their education has to be recommenced on larger lines ; I must then confine myself to one, but this a definite, test. At Cambridge, before an M.B. candidate can receive his degree, he must prove to us that, however well "stuffed" a pupil, he is able also to shew that he is not a mere mouthpiece, but in some reasonable measure has developed and realised his own personality, the orbit about which his capacity can range. Before he is admitted to graduation he must shew us not only how much he can repeat, but hidden under the pile of task and cram he must also discover himself. Plaintively as at first he may protest that his mind is only a mosaic, that he has nothing "original" about him, he has none the less to set to work on some piece of research—when to his surprise and pleasure he usually finds out that we had made something of a thinking and even a creative being of him after all ; and on this discovery he goes into practice a different man. But this thesis work for the M.B. is unfortunately the boon only of Cambridge men. I have therefore to seek my test in the M.D. exercises where, if anywhere, lies the test of personal construction, as contrasted with borrowed furniture. The M.D. candidate is too old for examination, and he should be

too good for a test so coarse. Therefore, all universities began by making the M.D. dissertation the chief and ultimate test of their peculiar influence, of their formative discipline, of their power of developing the mind as contrasted with mere schooling. Yet what are we witnessing to-day? That even this one test, this one remaining test of the quality not only of its progeny but of the university itself, is being quietly evaded. On inquiry I find that now of the M.D.'s of the London University scarcely more than 10 per cent. give this evidence of developed and ripened faculties; and it is whispered to me that on the same path even Victoria is a backslider. Yet is not this to relinquish all concern with the higher qualities of our students; tacitly to shrink from the searching test whether a university has justified itself as such, or, under whatever duress, is allowing itself to be dragged away to the place of a technical school? Such a refusal must mean stationary pupils, and stationary pupils make stationary teachers; if a university is to be an organ of life and discovery, it must begin and end by making research compulsory all round, research which must be as surely implied in the earliest stages of the teaching, as actively developed and manifested in the later.

#### REASON, IMAGINATION, AND LIFE.

And now, in conclusion, may I address myself for a moment to the young men entering into or crossing the threshold of Medicine. You have heard me insisting upon the power of knowledge; you have heard me resenting that worst part of ignorance, the conceit of knowing what we do not know, and the inveterate habit of calling opinions "facts"; you have heard me lamenting the English fatuity of disregarding causes to throw all our energies into mopping up their consequences; and you may begin to accuse me of the creed of the Jew of Malta, "I count religion but a childish toy, and hold there is no sin but ignorance." Far indeed from me be any such counsel! I agree that a man's overbeliefs are the most interesting thing about him. I bear in mind Carlyle's judgment on one who "had a great deal of unwise intellect." I see that the lower the idea the easier it is to formulate; so that in our satisfaction with the solidity of foundations we are

prone to forget the superstructure, for which ethical and imaginative insight also must be enlarged and illuminated. For if in logic we distinguish these endowments, if indeed in practice some may be nursed to the starvation of others, yet in the fulness of life they make each other, interpenetrate each other, and are bonded together. If then, limited by our prejudices or wearied by the quarrels of sects, we divide them in the mimic life of education, if we constrain our schools and universities to force intellect to the impoverishment of ethical and imaginative faculties, or even to nurse them in separate compartments, evil rather than good will ensue.

“ My brain I'll prove the female to my soul,  
My soul the father.”

In the everyday world we observe, even in persons of moderate parts, that character, consisting in a high idea of duty, in an intuitive perception of the essential and a sense of relative values, in a generous sympathy with various human experience, may ripen into a kind of intellectual power. And, if we ask how this may be, the answer is not very remote. The zone of intensest life is not in the individual alone, nor again in the universe alone, but in the weaving edge between the two. The tissue, as on the personal side it is wrought, we have to guard from decay; but the weavers' vision and hand, by an intuitive gift of insight and touch beyond common reckoning, are swiftly developing the pattern and designing the web. As Professor James says, “ideal impulses possess us in a most unaccountable way, and work gets done.” Thus after his fashion every man of action, even the man of science, is an artist; it is by imaginative vision that he gives birth to new ideas, which he then compares and approves by intellectual judgment. We know in part and we prophesy in part. This zone or phantom verge of intensest vital activity, this halo of creative life between the individual and his *milieu*, in ethics is faith and hope; in work is purpose and enthusiasm; in art is creation; in medicine is that spirit of research which is confined to no laboratory, but sees in every patient a new problem for interpretation and succour.

Your beliefs then are integral constituents of your lives, and are your driving power. For with duty, or values, or even with ends, the equal eye of science has no concern. And if any one of you thinks he has no belief, he lies in grievous

error. Consciously or not, each one of you is harbouring his own ideal of life, good or bad, and is living by it; if the moth gets into it your character will decay with it, and so will your influence on others. Mark then, day by day, the order of your springs of action, that your hearts may be lifted up, and the continuity between will and action quickened and knit together. We have seen that to progress we must be living above the mean position; and as modern philosophy postulates that our several worlds are not outside us but within us, and are what we are, we realise that the world is what we make it; and that our maturer responsibilities cannot be ordered by any external authority. To every man is his own Jacob's ladder. In the words of an accomplished author<sup>1</sup>: "How many rush hither and thither, and wear down the patience of earnest counsellors, and all the best years of their own lives, in fretting and scratching among ruins for the law by which they may live! They look for it in books, in the minds of friends, in the face of Nature who betrays in her eyes the knowledge of the secret but utters it not. And last of all a remnant of the many look into their own hearts, where the great law of life has been hidden from the beginning."

For the pattern and governance of your daily lives I am thankful to say that in our own profession you will find a true and helpful example. Conversant during a long life with the homes of medical men, I have felt rebuked again and again by their devotion to duty, their peerless generosity, their self-respect and simplicity of manners. Faultless we are not, as more than once I have dared to say. Besides the temptations common to all men we have temptations peculiar to ourselves. Our patients, loyal and grateful as most of them are, disappoint us at times; and these disappointments may be very galling. In these days of rather aimless unrest they are apt to forget the importance of continuity of observation and treatment. The consultant gives counsel indeed, but it is upon the family physician, who knows the whole story and sees the daily strains, that depend the patience, the vigilance, and the common sense needed to compass the cure. Yet too often, and perhaps by a tea-table cabal at a critical

<sup>1</sup> Miss Mary Cholmondeley—I forget in which of her interesting stories.

time, the patient is whisked off to some "specialist" who has an Installation, an Institution, a Home, or a Spa, which has to be kept agoing—*recte si possit!* And to the patient life is very dear; his judgment is enfeebled by illness and care; he clutches at any fair promise of aid; and the physician must remember that he also is human, and that when ill himself he is apt to run hither and thither quite as inconstantly.

And are we not more to blame when our imaginations, so kindly for others, stop a little short of our own brethren; when we are not quick to put ourselves in the place of him whom we are unhappily wont to designate not by the word of brother, but of "opponent." Now words sink into our minds like stones. The relations of medical men in small societies are delicate, and with the best intentions misunderstandings are apt to arise, and to be aggravated by busybodies. If, indeed, our medical neighbour be not very fraternal, not always perhaps very high-minded, we must remember that herein lies one of our special temptations; and, if only for our own happiness and peace of mind, we must be a little blind to his faults, and by our conduct endeavour to bring out not the worse but the better part of him. There is more awkwardness in these matters than malevolence, and there is nothing high-minded in being quick to take offence.

You may be tempted to say that it is all very well for me at my time of life thus to pose as your philosopher, and to set before you intellectual and moral ideals which you cannot hope in this rough and tumble world to attain. But to hitch our wagons to a star is not to reckon on camping in it at nightfall. An ancient sage has told us: "In magnis et voluisse sat est"; a modern poet puts it:

" What I aspired to be  
And was not, comforts me ; "

or, as we say in our strong northern vernacular: "He did his best, and he couldn't do nowt else."

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